implemented in part on the computing device **802** as well as via the platform **816** that abstracts the functionality of the cloud **814**.

CONCLUSION

[0154] Although the invention has been described in language specific to structural features and/or methodological acts, it is to be understood that the invention defined in the appended claims is not necessarily limited to the specific features or acts described. Rather, the specific features and acts are disclosed as example forms of implementing the claimed invention.

What is claimed is:

1. In a digital medium environment to enhance a digital experience for a user, a method implemented by at least one computing device, the method comprising:

receiving a request for a recommendation to enhance the digital experience for the user, the request including an indication of past user interactions of the user with the digital experience;

generating, using an estimator ensemble and based on the indication of past user interactions, multiple estimation values, at least one of the multiple estimation values being generated by each of a singular value decomposition estimator, a neighborhood or clustering estimator, a factorization estimator, a time-aware estimator, a variational autoencoder estimator, and a gradient boosting estimator included in the estimator ensemble;

generating, using a neural network and based on the multiple estimation values, the recommendation to enhance the digital experience for the user;

enhancing the digital experience based on the recommendation to generate an enhanced digital experience; and

displaying the enhanced digital experience.

2. The method as recited in claim **1**, the recommendation being one of multiple potential values, the neural network comprising a 3-layer neural network followed by a mapping and normalization layer, the mapping and normalization layer outputting the recommendation as a set of probability distributions on the multiple values.

3. The method as recited in claim **2**, the neural network having been trained to minimize cross-entropy loss between the recommendation and a one-hot representation of a ground truth.

4. The method as recited in claim **1**, the recommendation being one of multiple potential values, the neural network comprising a 3-layer neural network outputting the recommendation as a single value output.

5. The method as recited in claim **4**, the neural network having been trained to minimize root mean square error between the recommendation and a ground truth value.

6. The method as recited in claim **1**, the past user interactions including values provided by the user for different items included in the digital experience.

7. The method as recited in claim **6**, the past user interactions further including a time feature that indicates, for a particular item, a time that the particular item was first available to the user.

8. The method as recited in claim **6**, the past user interactions further including a time feature that indicates, for a particular item, a time that the user provided the value for the particular item.

9. The method as recited in claim **6**, the past user interactions further including a time feature that indicates a time that the user first provided a value for any of the different items.

10. The method as recited in claim **6**, the past user interactions further including a time feature that indicates, for a particular item, a timespan between a time that the particular item was first available to the user and a time that the user provided the value for the particular item.

11. In a digital medium environment to enhance a digital experience for a user, a method implemented by at least one computing device, the method comprising:

obtaining a first training data set that includes, for each of multiple users, values associated with the user for particular items;

training, using the first training data set, each of a singular value decomposition estimator, a neighborhood or clustering estimator, a factorization estimator, a time-aware estimator, a variational autoencoder estimator, and a gradient boosting estimator in an estimator ensemble to generate an estimation value;

obtaining a second training data set that includes, for each of the multiple users, values associated with the user for particular items;

generating, using the estimator ensemble and based on the second training data set, multiple estimation values;

training, using the multiple estimation values, a neural network to generate a recommendation to enhance the digital experience for the user; and

enhancing, using the recommendation, the digital experience for the user.

12. The method as recited in claim **11**, the recommendation being one of multiple potential values, the neural network comprising a 3-layer neural network followed by a mapping and normalization layer, the mapping and normalization layer outputting the recommendation as a set of probability distributions on the multiple values, and the training the neural network comprising training the neural network to minimize cross-entropy loss between the recommendation and a one-hot representation of a ground truth.

13. The method as recited in claim **11**, the recommendation being one of multiple potential values, the neural network comprising a 3-layer neural network outputting the recommendation as a single value output, the training the neural network comprising training the neural network to minimize root mean square error between the recommendation and a ground truth value.

14. A system comprising:

means for generating, based on an indication of past user interactions of a user with a digital experience, at least one of multiple estimation values from each of a singular value decomposition estimator, a neighborhood or clustering estimator, a factorization estimator, a time-aware estimator, a variational autoencoder estimator, and a gradient boosting estimator included in an estimator ensemble;

means for generating, based on the multiple estimation values, a recommendation to enhance the digital experience for the user; and

means for displaying, based on the recommendation to enhance the digital experience for the user, an enhanced digital experience.

15. The system as recited in claim **14**, the recommendation being one of multiple potential values, the means for